

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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Claim 1 (currently amended): A vehicle detector and classifier comprising:  
at least one electrically conductive loop arranged in a road having a road surface, wherein said at least one loop is arranged substantially in a plane perpendicular to the road surface, thereby defining an axis of the loop extending substantially parallel to the road surface, **and, wherein said plane extends laterally across the road, oriented in a direction substantially perpendicular to a direction of travel along the road.**

Claim 2 (canceled)

Claim 3 (canceled)

Claim 4 (currently amended): **A vehicle detector and classifier comprising:**  
~~A detector according to claim 1,~~

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cont.*  
**a plurality of electrically conductive loops arranged in a road having a road surface, wherein said loops are arranged substantially in a plane perpendicular to the road surface, thereby defining an axis of each of the loops extending substantially parallel to the road surface;**

wherein said at least one loop comprises a plurality of loops are arranged in a line in a slot cut into the road surface, **and, wherein said line extends laterally across the road in a direction perpendicular to a direction of travel along the road.**

Claim 5 (previously presented): A detector according to claim 4, wherein at least one active electronic component is located in the slot and adjacent to said at least one loop.

Claim 6 (currently amended): **A vehicle detector and classifier comprising:**  
~~A detector according to claim 5,~~

**a plurality of electrically conductive loops arranged in a line in a slot cut into a surface of a road, wherein said loops are arranged substantially in a plane**

**perpendicular to the road surface, thereby defining an axis of each said loop extending substantially parallel to the road surface;**

**wherein at least one active electronic component is located in the slot and adjacent to at least one said loop;**

wherein the components are mounted on circuits at regular intervals, said circuits comprising one of a small hybrid circuit and a thick film circuit.

Claim 7 (previously presented): A detector according to claim 1, wherein the at least one loop is encapsulated in a semi-rigid enclosure.

Claim 8 (previously presented): A detector according to claim 1, wherein said at least one loop is substantially rectangular as viewed along the axis.

Claim 9 (previously presented): A detector according to claim 1, wherein said at least one loop comprises a plurality of turns.

Claim 10 (previously presented): A detector according to claim 1, further comprising an inductive loop arranged substantially along a plane of the road surface, thereby defining an axis of the inductive loop extending substantially perpendicular to the road surface.

CI cont.  
Claim 11 (currently amended): **A vehicle detector and classifier comprising:**

A detector according to claim 10,

**at least one electrically conductive loop arranged in a road having a road surface, wherein said at least one loop is arranged substantially in a plane perpendicular to the road surface, thereby defining an axis of the loop extending substantially parallel to the road surface;**

**further comprising an inductive loop arranged substantially along a plane of the road surface, thereby defining an axis of the inductive loop extending substantially perpendicular to the road surface; and,**

further comprising means for superposing a result obtained from the at least one loop arranged substantially along the plane of the road surface and a result

obtained from the at least one loop arranged substantially in the plane perpendicular to the road surface, and means for displaying the results as thereby superposed.

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